Stormwater FAQs

What is Stormwater?

Remember the water cycle diagram from science class? A cloud drops rain (precipitation), the water soaks into the ground on its way to a stream (infiltration), where it rises back into the atmosphere (evaporation), turns into a cloud (condensation), and starts all over again. With time and development, the infiltration part of the water cycle has become quite important. This is the stage when water falling to earth becomes useful and necessary by providing us with drinking water.

What is Stormwater Runoff?

For centuries, Americans have been building structures large and small, followed eventually by paved streets and roadways and sidewalks. In recent decades we began to add other convenient uses like shopping malls and parking lots — all important elements of a quality community. However, all these areas, including rooftop surfaces, that cover large sections of ground that once soaked up rainwater now no longer allow rainwater to soak in. This creates what we now call “stormwater runoff” that flows into rivers, creeks and streams and feeds our drinking water sources.

Stormwater runoff can carry harmful nonpoint source pollutants, cause flooding, erode topsoil and stream banks, and destroy aquatic life habitats. Only 10% of rainwater becomes stormwater runoff in an area with only natural ground cover. Stormwater runoff escalates to 55% in developed areas with impervious covers and surfaces.

What is an Impervious Surface?

Impervious surfaces prevent the ground from absorbing water. Examples of impervious surfaces include homes, barns, roads, sidewalks, driveways and parking lots that are covered by materials such as asphalt, concrete, brick, stone, and rooftops. Gravel and compacted dirt roads also prevent the infiltration of water into soil.

What is Nonpoint Source Pollution?

Nonpoint Source Pollution is a contamination of ground or surface waters from everyday activities. With each rainfall, pollutants wash into stormwater drainage systems that flow into our waterways and eventually the ocean. These pollutants also can soak into the ground contaminating groundwater below.

What is a Stormwater Drainage System?

Stormwater Drainage System is a system designed to provide adequate surface drainage that includes inlets, street and roadway gutters, ditches, small channels, swales and underground piping systems.

What is being done in Fayette County to manage Stormwater Runoff?

Fayette County has required developers to install stormwater runoff control structures in neighborhoods and commercial sites for nearly 25 years. These drainage structures include pipes under roads, retention and detention ponds. Developers have been encouraged to leave the natural drainage system on a parcel of land as undisturbed so stormwater can flow naturally.

In 2005, Fayette County adopted the Post-Construction Stormwater Management for New Development and Redevelopment Ordinance. This ordinance requires all new subdivisions and project sites creating 5.000 square feet or more of impervious cover to submit a Stormwater Operations and Maintenance Plan and inspect and maintain stormwater drainage systems on a yearly basis.

Fayette County also conducts ongoing inventory and inspections of existing stormwater management infrastructure. The urbanized areas in Fayette County, as defined in the 2000 Census, were inventoried by the end of 2006. Each year additional structures in the more rural areas are added to the inventory.

Why does Fayette County need more funds to manage Stormwater Runoff?

The federal government enacted the Clean Water Act in an attempt to regain the balance between how much rainfall soaks into the ground and how much runs off. In 1983 the Clean Water Act required communities of 100,000 or more to meet certain requirements to manage stormwater runoff. In 2003, Phase II of the Clean Water Act extended those requirements to communities with populations between 10,000 and 100,000, that includes Peachtree City, Tyrone, Fayetteville and unincorporated Fayette County. Each year permit holders must report the efforts made the previous year to comply with the Clean Water Act.

In addition to the federal requirement, the Georgia General Assembly passed legislation requiring fifteen metropolitan Atlanta counties, including Fayette, to comply with a regional Watershed Management Plan. This plan requires local governments to implement seven local management measures, among them an asset management program for stormwater drainage systems.

The asset management program requires jurisdictions to "inventory" its existing drainage systems, assess their conditions, and develop a maintenance plan to keep these structures in good working order. Fayette County has discovered multiple drainage systems that are in poor condition and are either in need of extensive maintenance or in some cases to be completely replaced. Failure to adequately maintain drainage structures under or near roadways and public rights-of-way can cause them to deteriorate to the point of becoming unsafe.

What happens if Fayette County does not comply with the Stormwater Management Requirements?

Financial constraints have become increasingly apparent with the today's economic recession. It would seem to be much simpler to "postpone" spending additional funds until the economy recovers. Unfortunately, postponing this expense could cost Fayette County even more.

The function of stormwater drainage systems is to control roadway flooding and protect personal property during a storm. Storm drains that are not maintained cause roads to collapse and homes to flood, adding unnecessary risks, expenses, and inconvenience to Fayette County citizens.

Emergency repairs during heavy storms are much more expensive and intrusive than scheduled repairs. Funding must be transferred from other programs to cover the emergency repairs. Citizens' schedules and activities are interrupted until repairs can be made. Road closures and improvements are no longer scheduled around school traffic.

The financial impacts only compound with repair delays. EPD (Environmental Protection Division) can fine communities for noncompliance up to $100,000 per day. Communities within metro Atlanta can receive additional fines from the Metropolitan Atlanta Water Planning District.

Finally, it is important to understand that if not managed properly, the County's most valuable natural resource, its streams and watersheds, will be negatively impacted as a result of past and future urbanization congruent with poorly-maintained, degraded and un-repaired stormwater systems. Not managing stormwater can affect our quality of life from an economic and environmental standpoint. Many of us enjoy outdoor recreation activities along some of the County's beautiful streams and scenic lakeshores. Without stormwater management, the overall appearance of our community can deteriorate as well, simply from the force of uncontrolled runoff.